Abstract

Orthogonal Frequency Division Multiplexing (OFDM) is an efficient modulation technique for high data rate communication systems such as Digital audio broadcasting, DSL internet access, 4G etc. Peak to Average Power Ratio (PAPR) is one of major problems in OFDM system. In this paper, a combined Nth root technique with other conventionally established methods such as Clipping, SLM and PTS is proposed. An elaborate analysis is carried out by plotting CCDF curve in MATLAB demonstrating a picturesque comparison between our proposed technique and other methods individually. The obtained results show that the proposed system is better than its competitors when considering the three performance criteria together. For depicting PAPR reduction CCDF curve will be plotted by MATLAB.


Index Terms

Computer Science
Signal Processing

Keywords

Orthogonal Frequency Division Multiplexing (OFDM), Peak to Average Power Ratio (PAPR), Clipping, Selected Mapping (SLM), Partial Transmit Sequence (PTS), Complementary Cumulative Distribution Function (CCDF).